the patch they were most strikingly conspicuous. They were never seen on the western or pig-weed side of the patch, but appeared on its eastern border or in the slough grass. The only time one was seen feeding it was eating the seeds of a sunflower; having finished that repast it mounted to the top of the stalk, and flew from it to a field of ripened clover some eight or ten rods away. At the same time another of this species was making its way to the top of a small willow about eight feet high, which was the highest point any one of them was seen to have attained.

OBSERVATIONS OF BIRD-LIFE IN NORTHERN NEW JERSEY DURING THE WINTER OF 1910–1911.

BY LOUIS S. KOHLER.

Bird life this past winter has been unusually abundant throughout Northern New Jersey. In fact, my records have surpassed those of any year within the past decade, and it is my opinion that this profusion of residents and visitants was almost wholly due to the mildness and openness of the season. Owing to the lack of sufficient time, observations this season were curtailed to a large extent and were only made on those days available, whereas in previous years observances were made daily, and in view of this curtailment, it is my opinion that many species went unrecorded.

December began with cold, bracing weather and ice formed on a majority of the shallow ponds in this vicinity. This weather continued through the month until December 27th when it moderated slightly. Snow fell on the 4th to the depth of nine inches and again on the 11th and 12th three inches more fell. On Christmas Day, which was clear and cold with a biting westerly wind, a large portion of this snow still remained on the ground. On the 29th the temperature dropped below freezing and remained so until New Year's Eve. New Year's Day was marked by heavy clouds during the morning and a drizzling rain accompanied by a cold northwest wind in

the afternoon. The two weeks following New Year's were also marked by heavy rains and a general rise in temperature. With this rise in temperature came a thaw which made traveling under foot very disagreeable. January 16th, 17th, 18th and 19th were clear and very cold. Light variable winds prevailed on each of these days.

On January 22nd, about three inches of snow fell. This storm was accompanied by a northeast wind and a slight rise in temperature. The last nine days of January were generally fair, excepting the 26th, 27th and 29th when drizzling rains occurred which eradicated all traces of the snowfall of the 22nd. This entire period up to the 31st was quite warm and only on the last day did the temperature drop below 30° Fahr.

The first two weeks of February held forth almost daily changes of weather. The 1st, 5th, 11th and 13th were fair and rather warm. On the 2nd and 8th sleet storms occurred. Snow prevailed on the 3d, 6th, 7th and 9th and these storms were usually accompanied by a slight dropping of the thermometer. On the 4th a heavy thunder and lightning storm occurred and was followed by a rise in temperature and short period of clear weather. The 10th and 14th were marked by warm rains.

The last two weeks were generally fair and moderate. Snowfalls occurred on the 16th and 20th, but the snow did not lie upon the ground in either case more than two or three days. The temperature was variable throughout this latter period. It did not drop to 25° Fahr, and for a major portion of the time remained in the vicinity of the freezing point.

In making the following records, I visited Wayne, Pequannock, Pompton Plains, Pompton Junction, Upper Mountclair, Great Notch, Newark Meadows and East Orange, and as the basis of these operations used points about my home (Bloomfield.) There were three places in Bloomfield in which extensive observations were made on each day records were made. These were on a twenty acre farm near my home which I shall hereafter style "The Haunt," Noll's Swamp and Bennett's Swamp. This farm which I have named "The Haunt" is an

exceptionally fine tract in which to pursue studies of many of the bird residents and visitants of this section, as there is always an abundance of both during their seasons. It was on this tract that I began my first recordings of the birds and where I first gathered notes regarding their local distribution, nestings and habits. It has always been my custom to include this farm in all my tramps when in the neighborhood. On the days of each year when my largest lists are taken, this little tract has always been made the nucleus about which is built the entire structure, and it is rare when it does not furnish the major portion thereof. The two swamps mentioned consist of about twenty acres each and are always prolific in birdlife the whole year around. In addition to the above places, Branch Brook Park, on the outskirts of Newark, was frequently visited and yielded several interesting surprises. Among these were the two records of the Fox Sparrows. This bird is very rare during the winter in this locality, another bird which is usually uncommon in the winter in this section is the Redheaded Woodpecker. The following records will show that this past winter this bird was present during the first half on almost each day observations were made. The records of the Merganser on the 1st of January and February 19th were also out of the ordinary.

The bird observed were: American Herring Gull, Marsh Hawk, Sharpshinned Hawk, Sparrow Hawk, Barred Owl, Downy Woodpecker, Red-headed Woodpecker, Southern Flicker, Blue Jay, Crow, Starling, Meadowlark, Goldfinch, Pine Siskin, White-throated Sparrow, Tree Sparrow, Slate-colored Junco, Song Sparrow, Fox Sparrow, Brown Creeper, White-breasted Nuthatch, Chickadee, Golden-crowned Kinglet and Merganser. This makes a total of twenty-four species observed.

December 5th.—A male Flicker was found in the apple orchard in The Haunt during the early morning. No other birds apparent. December 11th.—A pair of White-throated Sparrows found feeding on the berries of the Virginia creeper in The Haunt.

December 18th.—Red-headed Woodpecker—One in Noll's Swamp

and a pair in Bennett's Swamp; Junco—three in a sheltered ditch in Noll's Swamp; Blue Jay—one in Noll's and two in Branch Brook Park; Barred Owl—one in Noll's and one in Branch Brook Park; Pine Siskin—three in Branch Brook Park; Tree Sparrow—common at Bennett's and in Park; White-breasted Nuthatch—one at Bennett's and two in Park; White-throated Sparrow—two in Branch Brook Park; Downy Woodpecker—one in Park; Fox Sparrow—one in Park among laurels. My attention was attracted to this latter species by its metallic "Cheep" which it uttered at frequent intervals.

December 19th.—A pair of Herring Gulls were found this afternoon on the Newark Meadows flying over and occasionally dipping into the murky waters of the Passaic River. No other birdlife apparent.

December 22d.—A pair of Golden-crowned Kinglets appeared in The Haunt at noon to-day among the locusts. Their lisping notes were heard at numerous times during the remainder of the afternoon.

December 25th.—Red-headed Woodpecker—one in Noll's and one in Bennett's; White-breasted Nuthatch—two in Bennett's Swamp among the second growth maples; Song Sparrow—four in Branch Brook Park and one near a pigsty in Great Notch; Chickadee—two in Branch Brook Park; White-throated Sparrow—four among the laurels in Branch Brook Park; Barred Owl—one seen in Park and another in Montclair Heights on hill back of State Normal School; Golden-crowned Kinglet—two found in The Haunt; Crow—nineteen seen at numerous places about Bloomfield; Junco—five found among dead grasses near Montclair Heights.

December 26th.—Crow—two seen flying about near ground in The Haunt; also found a Marsh Hawk here in the early morning. Two Song Sparrows were seen at Bennett's Swamp.

December 28th.—During an half on the Newark Meadows to-day found two Song Sparrows and a pair of Tree Sparrows among the dead rushes near the river bank.

January 1st.—Observations made in Passaic and Morris Countles only. At Wayne (Morris) crows were found to be fairly abundant among the small groups of trees present and on the ground near the granaries. They were later found at Pequannock, and Pompton Plains in Morris Co., and at Pompton and Pompton Junction in Passaic Co. in large numbers. They were usually upon the ground at the last four places. White-breasted Nuthatch—common at Pequannock and Pompton Plains in the trees near the banks of the Pompton River; Tree Sparrow—abundant at Wayne and were continually singing; Blue Jay—very abundant at Pequan-

nock; White-throated Sparrow—three along river edge at Pompton Plainn; Marsh Hawk—two near Morris Canal Feeder in Pompton Plains; Goldfinch—common at Pompton Plains among trees near river and in open fields adjacent; Downy Woodpecker—common at Pequannock; Brown Creeper—one at Pompton Plains; Merganser (drake) on Pompton River at Pompton Plains. This bird is rather uncommon in this locality. Song Sparrow—but one found and this at Pompton Plains in company with White-throats. Sharp-shinned Hawk—one at Pompton Plains.

January 6th.—Found a few Herring Gulls silently flying up and down the Passaic River on Newark Meadows this afternoon. There were probably fifteen, although it was difficult to count them, as they would disappear occasionally and return in pairs and trios.

January 8th.—Red-headed Woodpecker—one male in Bennett's Swamp. Golden-crowned Kinglet—two pairs among laurels in northern section of Branch Brook Park. Brown Creeper—a pair in company with the Kinglets in Park. Fox Sparrows—three among laurels in Park. Were very shy and could only get slight glimpses of them as they flew about underneath the cover.

January 15th.—Sparrow Hawk—one found perching at the top of a dead tree in Bennett's Swamp. Red-headed Woodpecker—one found quietly pecking on the bark of a decayed maple in this swamp. Tree Sparrow—common among dead grass and vegetation in this swamp. Golden-crowned Kinglet—four among the white birches in Branch Brook Park; Goldfinch—four flying over playfield inn orthern section. A small flock appeared in Noll's Swamp in late afternoon. White-throated Sparrow—three among the rose brambles near Clark's Pond in Branch Brook Park.

January 17th.—While on the Meadows this afternoon the only bird which I found was a Sharp-shinned Hawk. This was located near the Pennsylvania Short Line and was devouring the remains of a domestic rabbit.

January 19th.—A Downy Woodpecker was seen about The Haunt all day, especially about an apple tree, on which was nailed several pieces of suet. This bird was very fond of this material, but was only seen on this date.

January 22d.—A Red-headed Woodpecker appeared in The Haunt about noon to-day in the orchard and remained for about fifteen minutes.

January 23d.—Red-headed Woodpecker—a pair found in Noll's Swamp. Crows—two found in East Orange near old waterworks. Blue Jay—one found with Crows. Song Sparrows—two in open field in East Orange. White-throated Sparrow—six at Watsessing

Park, East Orange. Tree Sparrow—ten in company with White-throats.

January 28th.—A Sparrow Hawk appeared over the house this morning flying northward against a strong wind. Its progress through the air was materially hindered by the wind and was fully ten minutes before it disappeared on the northern horizon.

January 29th.—Meadowlark—one at Powder Works in Wayne. N. J. This is rather uncommon in this part of the state during January and only record I have for this month. Marsh Hawk—one in swamp near Pequannock. Crow—one at Pompton Junction.

February 2d.—Red-headed Woodpecker—one about The Haunt throughout the day.

February 3d.—Six Goldfinches appeared among locusts in The Haunt to-day while a heavy snowstorm was in progress. Their twittering was heard for over an hour, although they were not visible at times owing to the falling snow.

February 5th.—Sparrow Hawk—two found in Noll's Swamp and two more at Bennett's. Tree Sparrow—three in Branch Brook Park among laurels. Golden-crowned Kinglet—two in company with Tree Sparrows in Park. White-throated Sparrow—one in Park with Kinglets and Tree Sparrows.

February 12th.—Crows—four in The Haunt. Junco—two in Noll's Swamp. Downy Woodpecker—one in Noll's. Blue Jay—one in Watsessing Park. Sparrow Hawk—one at Riverside, Passaic Co., N. J.

February 18th.—Visited Pequannock, Great Notch, Pompton Plains and Pompton Junction. Found Crows abundant at all places visited. Were usually walking about on the ground. Chickadee—common along the canal banks in Pequannock and near the Pompton River at Pompton Plains. Marsh Hawk—one at Pompton Plains. White-breasted Nuthatch—one in a poplar at Pompton Plains. Three Sparrow—ten in open field at Pompton Plains. Mergansers—two along river bank in Pompton Plains. Downy Woodpecker—one at Pompton Junction. Pine Siskin—one in company with Chickadees at Pompton Plains.

February 21st, 1911.—White-breasted Nuthatch fount in The Haunt at noon among locusts.

February 23d, 1911.—A Golden-crowned Kinglet appeared in The Haunt to-day in company with fifteen or sixteen Chickadees.

February 26th, 1911.—Crow—one in The Haunt. Sparrow Hawk—one in Noll's Swamp devouring the remains of a freshly killed English Sparrow. Junco—one in Noll's Swamp. In late afternoon a small flock of about fifty Crows flew northward over the house.